

09/187,700 Proposed Claim Amendments

1. (Marked up) A storage medium data protecting method of protecting data on a storage medium having a plurality of unit areas, comprising:

a step of generating a random key ~~[[data]]~~, encrypting ~~[[the]]~~ said random key ~~[[data]]~~ with a password, and writing ~~[[the]]~~ said encrypted random key ~~[[data]]~~ to ~~[[said]]~~ the storage medium; NO

a step of encrypting the data with ~~[[the]]~~ said generated random key ~~[[data]]~~, and writing ~~[[the]]~~ said encrypted data to ~~[[said]]~~ the storage medium; NO

a step of reading ~~[[the]]~~ said encrypted ~~key data~~ from ~~[[said]]~~ the storage medium;

a step of decoding ~~[[the]]~~ said encrypted ~~key data~~ with ~~[[the]]~~ said password; and

a step of decoding the data on ~~[[said]]~~ the storage medium with ~~[[the]]~~ said decoded key data,

wherein said random key ~~[[data]]~~ generating step comprises:

a step of generating a different random key ~~[[data]]~~ for each ~~[[of a plurality of]]~~ unit storage area of the plurality of unit storage areas ~~[[of said storage medium]]~~, so that said each unit storage area is assigned a different random key ~~than any other of the plurality of unit storage areas~~, and said assignment of said different random key to said each unit storage area being based on a particular unit storage area to which the data, once encrypted, is to be stored;

a step of encrypting each of said different random [[key data for each unit storage area]] keys with said password, and

a step of writing each of said encrypted key data to [[said]] the storage medium,

wherein said data encrypting step comprises a step of encrypting the data with [[the]] said random key [[data]] corresponding to its said particular unit storage area to write the data, and

wherein said data decoding step comprises a step of decoding the data with [[the]] said decoded key data corresponding to said particular unit storage area where the data have been read.

1. (Clean form) A storage medium data protecting method of protecting data on a storage medium having a plurality of unit areas, comprising:
  - a step of generating a random key, encrypting said random key with a password, and writing said encrypted random key to the storage medium;
  - a step of encrypting the data with said generated random key, and writing said encrypted data to the storage medium;
  - a step of reading said encrypted key data from the storage medium;
  - a step of decoding said encrypted key data with said password; and
  - a step of decoding the data on the storage medium with said decoded key data,wherein said random key generating step comprises:
  - a step of generating a different random key for each unit storage area of the plurality of unit storage areas, so that said each unit storage area is assigned a different random key than any other of the plurality of unit storage areas, and said assignment of said different random key to said each unit storage area being based on a particular unit storage area to which the data, once encrypted, is to be stored;
  - a step of encrypting each of said different random keys with said password, and
  - a step of writing each of said encrypted key data to the storage medium,

wherein said data encrypting step comprises a step of encrypting the data with said random key corresponding to its said particular unit storage area to write the data, and

wherein said data decoding step comprises a step of decoding the data with said decoded key data corresponding to said particular unit storage area where the data have been read.